5. (Amended) The method of claim 4, wherein said first thermostable DNA polymerase is a Taq DNA polymerase lacking 5'-3' exonuclease activity and having a Tabor-Richardson mutation [or a functional derivative thereof].

6. (Amended) The method of claim 5, wherein said first thermostable DNA polymerase is AmplitaqFS™, Taquenase™, or Thermo Sequenase™ [or functional derivatives thereof].

7. (Amended) The method of claim 6, wherein said first thermostable DNA polymerase is Thermo Sequenase™ [or a functional derivative thereof].

9. (Amended) The method of claim 8, wherein said second thermostable DNA polymerase is Taq DNA polymerase, [or a functional derivative thereof,] Tth DNA polymerase, [or a functional derivative thereof,] Tfl DNA polymerase, [or a functional derivative thereof, or] Klentaq (Taq DNA polymerase)(-exo5'-3')[, or a functional derivative thereof,] or a DNA polymerase from Carboxydothermus hydrogenoformans having reverse transcriptase activity[, or a functional derivative of the DNA polymerase].

11. (Amended) The method of claim 1, wherein said first thermostable DNA polymerase is Thermo Sequenase™ [, or a functional derivative thereof,] and said second thermostable DNA polymerase is Taq DNA polymerase[, or a functional derivative thereof].

12. (Amended) The method of claim 11, wherein said second thermostable DNA polymerase is Tth DNA polymerase[, or a functional derivative thereof,] and wherein step (a) is carried out in the presence of $MnCl_2$ or Mn acetate.

41. (Amended) The kit of claim 40, wherein said first thermostable DNA polymerase is a Taq DNA polymerase lacking 5'-3' exonuclease activity and having a Tabor-Richardson mutation [or a functional derivative thereof].

42. (Amended) The kit of claim 41, wherein said first thermostable DNA polymerase is AmplitaqFS™, Taquenase™, or ThermoSequenase™ [or functional derivatives thereof].

43. (Amended) The kit of claim 42, wherein said first thermostable DNA polymerase is ThermoSequenase™ [or a functional derivative thereof].

44. (Amended) The kit of claim 37, wherein said second thermostable DNA polymerase is Taq DNA polymerase, [or a functional derivative thereof,] Tth DNA polymerase, [or a functional derivative thereof,] Tfl DNA polymerase, [or a functional derivative thereof, or] Klentaq (Taq DNA polymerase)(-exo5'-3')[, or a functional derivative therefo,] or a DNA polymerase from Carboxydothermus hydrogenoformans having reverse transcriptase activity[, or a functional derivative of the DNA polymerase].

45. (Amended) The kit of claim 44, wherein said second thermostable DNA

polymerase is Taq DNA polymerase[, or functional derivative thereof].

64. (Amended) A method for sequencing at least a portion of a DNA involving simultaneously amplifying the DNA and generating full length and truncated copies of the DNA for sequencing, comprising the steps of

(a) subjecting a mixture in a single step to a thermocycling reaction, the thermocycling reaction comprises heat denaturation, annealing and synthesis, wherein said mixture comprises

said DNA,

a buffer solution,

a first primer which is able to hybridize with a strand of said DNA,

a second primer which is able to hybridize with a strand of said DNA complementary to the strand with which the first primer is able to hybridize, wherein at least one of the first and second primers is labelled,

deoxynucleotides or deoxynucleotide derivatives, wherein said deoxynucleotide derivatives are able to be incorporated by a thermostable DNA polymerase into growing DNA molecules in place of one of dATP, dGTP, dTTP or dCTP,

at least one dideoxynucleotide or another terminating nucleotide,

at least two thermostable DNA polymerases, wherein said at least two thermostable DNA polymerases are at least a first thermostable DNA polymerase and a second thermostable DNA polymerase,

which second thermostable DNA polymerase has a reduced ability to incorporate said dideoxynucleotide or another terminating nucleotide compared with said first thermostable DNA polymerase, and

at least one polymerase-inhibiting agent against at least one of said at least two thermostable DNA polymerases, wherein said at least one polymerase-inhibiting agent loses inhibitory ability, thereby allowing said at least one of said at least two thermostable DNA polymerases to be active, at a temperature which is at least the temperature at which unspecifically hybridized primers separate from a DNA molecule, [wherein said at least one polymerase-inhibting agent is a compound having at least one acid anhydride group per molecule,]

to generate full-length and truncated copies of said DNA, wherein the full-length copies have a length equal to that of at least a portion of said DNA spanning the binding sites of the first and second primers;

(b) separating at least said truncated copies to make a sequence ladder; and thereafter

(c) reading the sequence ladder to obtain the sequence of said at least a portion of said DNA.

68. (Amended) The method of claim 67, wherein said first thermostable

DNA polymerase is a Taq DNA polymerase lacking 5'-3' exonuclease activity and having a Tabor-Richardson mutation [or a functional derivative thereof].

69. (Amended) The method of claim 68, wherein said first thermostable DNA polymerase is AmplitaqFS™, Taquenase™, or Thermo Sequenase™ [or functional derivatives thereof].

70. (Amended) The method of claim 69, wherein said first thermostable DNA polymerase is Thermo Sequenase™ [or a functional derivative thereof].

71. (Amended) The method of claim 64, wherein said at least one polymerase-inhibiting agent has at least one acid anhydride group per molecule [second thermostable DNA polymerase has reverse transcriptase activity].

β 6

72. (Amended) The method of claim 64 [71], wherein said second thermostable DNA polymerase is Taq DNA polymerase, [or a functional derivative thereof,] Tth DNA polymerase, [or a functional derivative thereof,] Tfl DNA polymerase, [or a functional derivative thereof,] or Klentaq (Taq DNA polymerase)(-exo5'-3')[, or a ~~functional derivative thereof~~].

74. (Amended) The method of claim 64, wherein said first thermostable DNA polymerase is Thermo Sequenase™ [, or a functional derivative thereof,] and said second thermostable DNA polymerase is Taq DNA polymerase[, or a functional

β7

derivative thereof].

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75. (Amended) The method of claim 74, wherein said second thermostable DNA polymerase is Tth DNA polymerase[, or a functional derivative thereof,] and wherein step (a) is carried out in the presence of $MnCl_2$ or Mn acetate.

99. (Amended) The method of claim 64, wherein said at least one polymerase-inhibiting [polymerase-inhibting] agent reversibly loses inhibitory activity at the temperature which is at least the temperature at which unspecifically hybridized primers separate from a DNA molecule, thereby enabling said agent to inhibit said at least one of said at least two thermostable DNA polymerases in more than one thermocycle.

100. (Amended) A kit for sequencing at least a portion of a DNA [RNA], comprising

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deoxynucleotides or deoxynucleotide derivatives, which deoxynucleotide derivatives are able to be incorporated by a thermostable DNA polymerase into growing DNA molecules in place of one of dATP, dGTP, dTTP or dCTP;

at least one dideoxynucleotide or another terminating nucleotide;

at least two thermostable DNA polymerases, wherein said at least two thermostable DNA polymerases are at least a first thermostable DNA polymerase and a second thermostable DNA polymerase, which second thermostable DNA

polymerase has a reduced ability to incorporate said dideoxynucleotide or another terminating nucleotide in comparison to said first thermostable DNA polymerase; and

at least one polymerase-inhibiting agent against at least one of said at least two thermostable DNA polymerases, wherein said at least one polymerase-inhibiting agent loses inhibitory ability, thereby allowing said at least one of said at least two thermostable DNA polymerases to be active, at a temperature which is at least the temperature at which unspecifically hybridized primers separate from a DNA molecule[, wherein said at least one polymerase-inhibting agent is a compound having at least one acid anhydride group per molecule].

104. (Amended) The kit of claim 103, wherein said first thermostable DNA polymerase is a Taq DNA polymerase lacking 5'-3' exonuclease activity and having a Tabor-Richardson mutation [or a functional derivative thereof].

105. (Amended) The kit of claim 104, wherein said first thermostable DNA polymerase is AmplitaqFS™, Taquenase™, or ThermoSequenase™ [or functional derivatives thereof].

106. (Amended) The kit of claim 105, wherein said first thermostable DNA polymerase is ThermoSequenase™ [or a functional derivative thereof].

107. (Amended) The kit of claim 100, wherein said second thermostable DNA polymerase is Taq DNA polymerase, [or a functional derivative thereof,] Tth DNA polymerase, [or a functional derivative thereof,] Tfl DNA polymerase, [or a functional derivative thereof, or] Klentaq (Taq DNA polymerase)(-exo5'-3'),[or a functional derivative therefo,] or a DNA polymerase from Carboxydothermus hydrogenoformans having reverse transcriptase activity[, or a functional derivative of the DNA polymerase].

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108. (Amended) The kit of claim 107, wherein said second thermostable DNA polymerase is Taq DNA polymerase[, or functional derivative thereof].

121. (Amended) The kit of claim 100, wherein said at least one polymerase-inhibiting [polymerase-inhibting] agent reversibly loses inhibitory activity at the temperature which is at least the temperature at which unspecifically hybridized primers separate from a DNA molecule, thereby enabling said agent to inhibit said at least one of said at least two thermostable DNA polymerases in more than one thermocycle.

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124. (Amended) The method of claim 71 [64], wherein said polymerase-inhibiting agent is citraconic anhydride, cis-aconitic anhydride, phthalic anhydride, succinic anhydride or maleic anhydride.

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125. (Amended) The method of claim 71 [64], wherein said agent is a compound having two acid anhydride groups per molecule.

Please add the following new claims (claims 127-144).

-- 127. (New) The method of claim 64, wherein said mixture further comprises a polymerase-inhibiting agent X against one of said at least two thermostable DNA polymerases, wherein said polymerase-inhibiting agent X and said at least one polymerase-inhibiting agent can inhibit different thermostable DNA polymerases.

128. (New) The method of claim 127, wherein said polymerase-inhibiting agent X can inhibit said second thermostable DNA polymerase and said at least one polymerase-inhibiting agent can inhibit said first thermostable DNA polymerase.

129. (New) The method of claim 128, wherein an inhibitory activity of said polymerase-inhibiting agent X and an inhibitory activity of said at least one polymerase-inhibiting agent are reduced ~~at different~~ time,

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130. (New) The method of claim 129, wherein the inhibitory activity of said polymerase-inhibiting agent X is reduced earlier than the inhibitory activity of said at least one polymerase-inhibiting agent.

131. (New) The method of claim 128, wherein said polymerase-inhibiting agent X is an antibody against said second thermostable DNA polymerase.

132. (New) The method of claim 64, wherein said mixture further comprises at least one agent that lowers the melting point of the DNA.

133. (New) The method of claim 132, wherein said at least one agent is selected from the group consisting of glycerin, trehalose, betaine or DMSO.

134. (New) The method of claim 97, wherein an inhibitory activity of said at least one polymerase-inhibiting agent is reversibly reduced at a specific temperature and after a specific number of thermocycles allowing sequencing of the DNA to start after the DNA has been amplified.

135. (New) The method of claim 134, wherein the inhibitory activity of said at least one polymerase-inhibiting agent is reversibly reduced when the reaction mixture is exposed at an elevated temperature.

136. (New) The method of claim 135, wherein said first thermostable DNA polymerase is a DNA polymerase which carries a Tabor-Richardson mutation and has no 5' to 3' exonuclease activity.

137. (New) The method of claim 136, wherein said first thermostable DNA polymerase is selected from the group consisting of AMPLITAQ FS™, TAQUENASE™, and THERMOSEQUENASE.

138. (New) The kit of claim 100 further comprising a polymerase-inhibiting agent X against one of said at least two thermostable DNA polymerases, wherein said polymerase-inhibiting agent X and said at least one polymerase-inhibiting agent can

inhibit different thermostable DNA polymerases.

139. (New) The kit of claim 138, wherein said polymerase-inhibiting agent X can inhibit said second thermostable DNA polymerase and said at least one polymerase-inhibiting agent can inhibit said first thermostable DNA polymerase.

140. (New) The kit of claim 138, wherein said polymerase-inhibiting agent X is an antibody against said second thermostable DNA polymerase.

141. (New) The kit of claim 100 further comprising at least one agent that lowers the melting point of the DNA.

142. (New) The kit of claim 141, wherein said at least one agent is selected from the group consisting of glycerin, trehalose, betaine or DMSO.

143. (New) The method of claim 8, wherein said mixture further comprises a polymerase-inhibiting agent against said second thermostable DNA polymerase.

144. (New) The method of claim 143, wherein an inhibitory activity of said polymerase-inhibiting agent is reduced after reverse transcription of the RNA. - -

REMARKS

The amendment to page 8 of the specification is made to correct a spelling error.